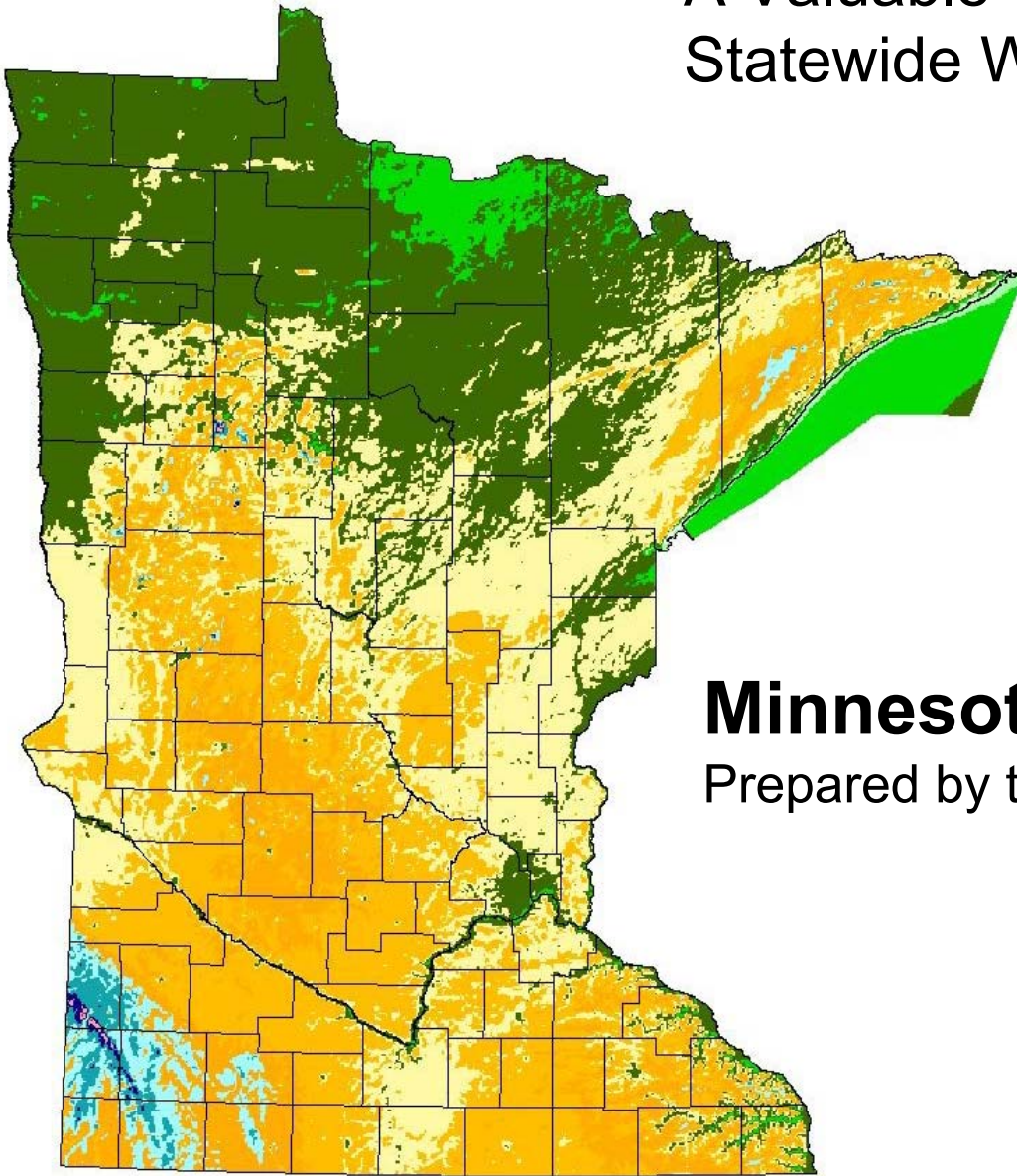


A Valuable Tool in Developing Statewide Wind Energy Policy



Minnesota's Wind Resource

Prepared by the MN Dept of Commerce



Why is there wind development in Minnesota?

- Supportive Public Policy
 - Sales Tax Exemption on wind turbines
 - State Production Incentives
- 1994 Legislative Agreement with Xcel Energy (Prairie Island)
 - 425 MW by 2002
 - 400 MW by 2012
 - 125 MW of Biomass
 - Renewable Development Fund



Construction Period (approx. 1 year/100MW)

- Motels
- Restaurants
- Concrete
- Local Hardware & Supply
- Minimal benefit to local contractors



Operation and Maintenance

- Estimated .1 FTE permanent job per MW (10 jobs per 100 MW)
- Skilled Technicians, Administrative and Management
- Long-term jobs (life of machines is 30 years)
- Locally Based



Manufacturing

- Mfg in Selected Areas
 - Blades in Grand Forks, ND
 - Tubular Towers in Red Wing & Porter, MN & Fargo, ND
 - Turbine assembly, Champlain, ILL.
- Potential for major repair facilities



Impacts for Host Community

- Siting
- Tax Revenue/Policy
- Long Term Benefits



State and Local Siting

- In MN, Based on Size of Project
 - Up to 5 MW - Local Govt.
 - 5 MW or more - State Govt. rules
 - Siting Application through Environmental Quality Board
 - Fair and reasonable to encourage orderly development



Tax Revenue/Policy

- Overview of the Minnesota Experience
 - Machines initially exempted from Property Tax by state policy
 - State policy was modified
 - Local communities needed
 - To realize revenue from this development
 - To maintain roads and infrastructure
 - Status Today
 - Local communities organizing to support an Energy Production Tax rather than Property Tax



“Community-Based” Renewable Project Characteristics

- Distributed Generation
- Clean, Undepletable Supply
- Farmer or Rural Community Owned
- Power or biofuel is used locally
- Environmental benefits
- Green Attributes



Components in Community-Based Wind

- Public Power Sector - Muni's and Coops
- Local financial community
- Local landowners and investors



Form a Wind Energy Entity

- Ongoing work to explore innovative business models for local ownership
 - Wind Coops
 - LLC's



Farmer-Owned Large Scale Wind Projects

- Kas Brothers
- Luverne, MN
 - MN Wind I and MN Wind II



Challenges for Wind Development

- Consistent Tax Revenue
- Increase Long Term Benefits to Local Community
- Increase Local Ownership



Balance

- Encourage Renewable Energy Development
- Recognize Needs of Host Communities